

Serial No. 09/750,682

Cont'd G1
the support substrate 15, a semiconductor layer 14 comprising non-monocrystal material, an organic light-emitting medium 12, and a cathode (first electrode) 10 are formed successively. To the extension 18 extended in the horizontal section from the edge section 17 of the semiconductor layer 14, the anode (second electrode) 16 is electrically connected.

IN THE CLAIMS:

Amend claims 1 to 4 and 8 to 13 as follows:

Q2
1. (Amended) An organic electroluminescence element comprising an anode, a semiconductor layer, an organic light-emitting medium, and a cathode wherein the organic light-emitting medium is located between a first electrode and the semiconductor layer comprising a non-monocrystal material and a second electrode is electrically connected to an edge section of the semiconductor layer when either one of the anode or cathode is designated as the first electrode and the other electrode is designated as the second electrode.

2. (Amended) The organic electroluminescence element according to claim 1 wherein the second electrode is electrically connected to an extended section extended in a horizontal direction from the edge section of the semiconductor layer.

3. (Amended) The organic electroluminescence element according to claim 1 wherein the second electrode is electrically connected to two or more edge sections of the semiconductor layer.

4. (Amended) The organic electroluminescence element according to claim 1 wherein the second electrode is made in patterns of lattices or combs.

8. (Amended) The organic electroluminescence element according to claim 1, wherein the non-monocrystal material is a conductive conjugate polymer, an oxidizing agent added polymer, a reducing agent added polymer, an oxidizing agent added low-molecular weight compound, or a reducing agent added low-molecular weight compound.

Serial No. 09/750,682

9. (Amended) The organic electroluminescence element according to claim 1 wherein the semiconductor layer has a band gap of at least 2.7 eV.

10. (Amended) The organic electroluminescence element according to claim 1 wherein the semiconductor layer has a thickness of 1 to 700 nm.

11. (Amended) The organic electroluminescence element according to claim 1 wherein the semiconductor layer has a specific resistance within the range of 1×10^{-3} to $1 \times 10^4 \Omega \cdot \text{cm}$.

12. (Amended) The organic electroluminescence element according to claim 1 wherein the semiconductor layer has an electric charge concentration within the range of 1×10^{12} to $1 \times 10^{20} \text{ cm}^{-3}$.

13. (Amended) The organic electroluminescence element according to claim 1 wherein the semiconductor layer has a light transmittance of at least 10%.

Serial No. 09/750,682

Cancel claim 16 without prejudice or disclaimer.

Amend claims 18 to 20 as follows:

18. (Amended) A manufacturing method for an organic electroluminescence element including an anode, a semiconductor layer, an organic light-emitting medium, and a cathode, comprising forming a second electrode,

forming a semiconductor layer comprising a non-monocrystal material at a position where the second electrode is able to be electrically connected to an edge section of the semiconductor layer,

forming the organic light-emitting medium above the semiconductor layer, and

forming a first electrode above the organic light-emitting medium to interpose the organic light-emitting medium between the first electrode and the semiconductor layer,

when either one of the anode or cathode is designated as the first electrode and the other electrode is designated as the second electrode.

19. (Amended) The process for manufacturing the organic electroluminescence element according to claim 18, further comprising including a step for patterning in the step of forming the second electrode.

20. (Amended) The process for manufacturing the organic electroluminescence element according to claim 18, further comprising including forming an electric insulation film to cover the second electrode, or to form a non-injection type semiconductor layer or a metal layer.

Please add the following new claims:

21. (New) The organic electroluminescence element according to claim 1 wherein the organic light-emitting medium is not found between the second electrode and the semiconductor layer.

22. (New) A manufacturing method for an organic electroluminescence element including an anode, a semiconductor layer, an organic light-emitting medium, and a cathode, comprising

forming a second electrode,

forming the semiconductor layer comprising a non-monocrystal material at a position where the second electrode is able to be electrically connected to an extension section extending horizontally from an edge section of the semiconductor layer,

forming the organic light-emitting medium above the semiconductor layer, and

forming a first electrode above the organic light-emitting medium to interpose the organic light-emitting medium between the first electrode and the semiconductor layer,

when either one of the anode or cathode is designated as the first electrode and the other electrode is designated as the second electrode.

23. (New) The organic electroluminescence element according to claim 1 wherein the second electrode is located outside an area common to both the first electrode and the organic light-emitting medium.
